## Confronting Climate Risk in California

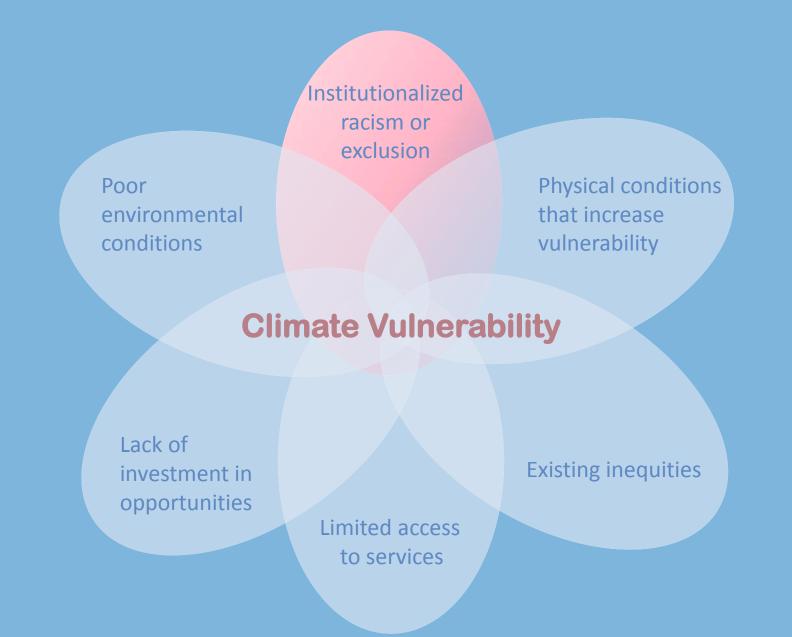
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- 1. Framework for connecting climate risk and housing
- 2. How are we addressing the risks of climate change?
  - -Tools for understanding climate risk
  - -Policy landscape of climate risk assessment and housing development
  - -Funding for disaster recovery
- 3. How does this play out on the ground?
- 4. What else is needed to plan for the climate future and present?

## Framework for connecting climate risk and housing

- Communities facing inequities face disproportionate climate change impacts due to institutionalized discrimination and unregulated free market.
- Climate change strategies all have positive and negative health and equity impacts
- Cross-sectoral planning creates structural change: Climate, health, equity, and community development in all plans and policies
- Climate change and community development are complex and multi-systemic--solutions must be intersectional and intersectoral, or they can do harm
- Government officials should work to ensure the protective role of government against harms of extractive economy.

#### **Framework**



#### Intersectionality of Climate Vulnerability



https://californiawaterblog.com/2017/02/26/californias-floods-of-2017-so-far/



https://www.sfgate.com/weather/article/smoke-forecast-Bay-rea-San-Francisco-Beijing-13377682.php

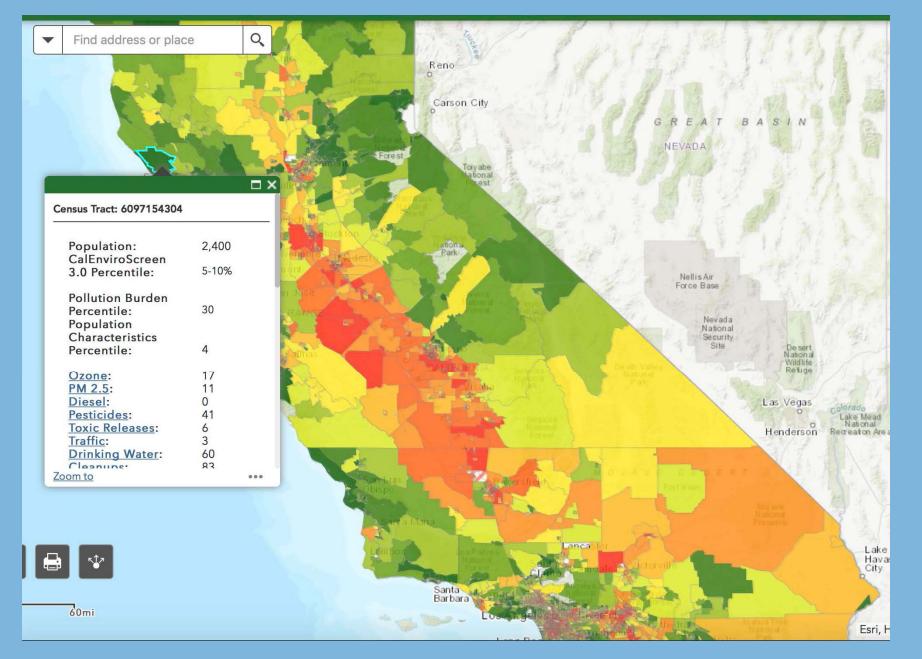


http://www.msnbc.com/msnbc/california-drought-creates-grim-ripple-effect#slide26

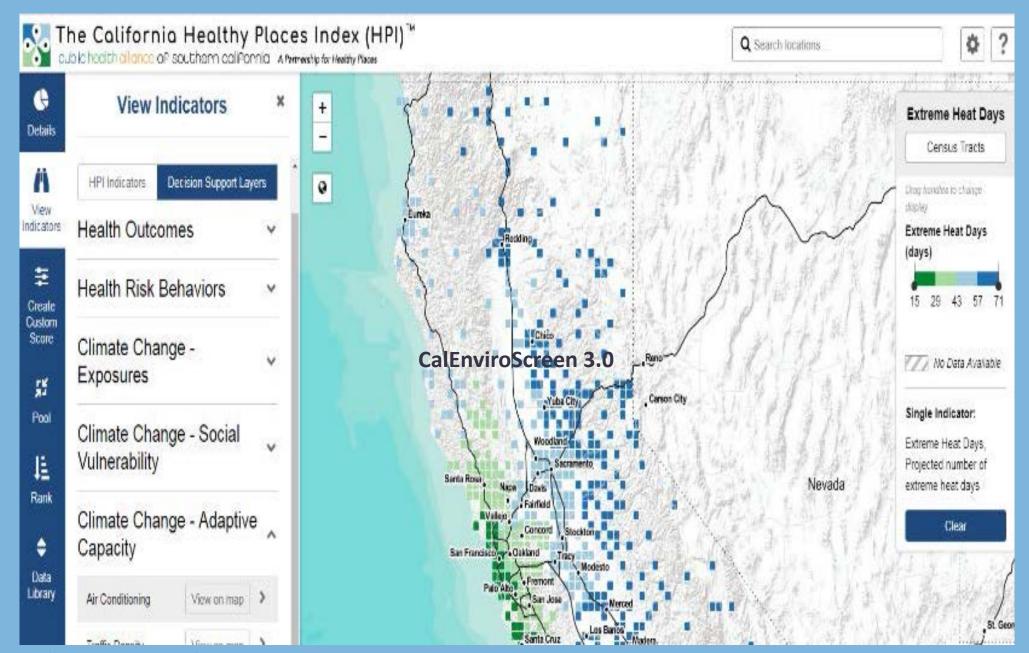
### Structural Discrimination and Climate Risk

## How are we addressing climate change risk?

## Tools for understanding climate risk

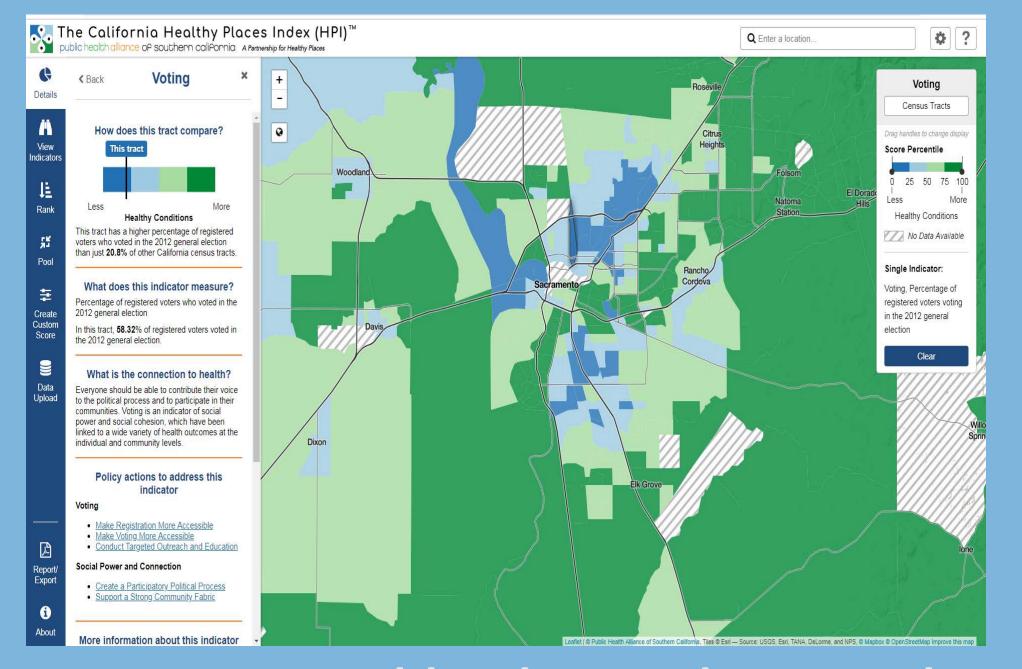


CalEnviroScreen 3.0



http://map.healthyplacesindex.org/

#### **CA Healthy Places Index**

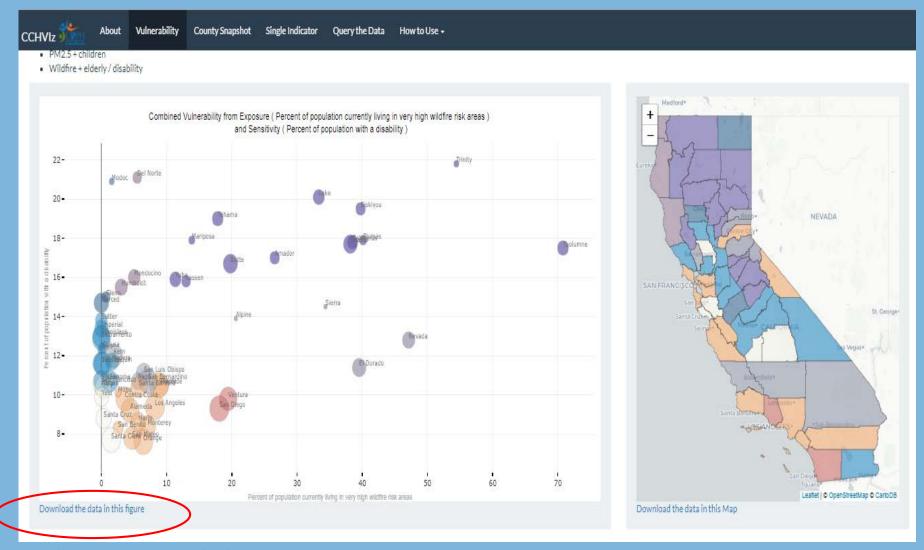


**Healthy Places Index Example: Voting** 

ENVIRONMENTAL EXPOSURES	Extreme Heat Days	Projected number of extreme heat days1	
	Air Quality (PM <sub>2.5</sub> )	Three-year annual mean concentration of particulate matter (PM <sub>2.5</sub> ) <sup>3, 6</sup>	
	Air Quality (ozone)	Three-year ozone concentration exceedance above state standard <sup>3, 6</sup>	
	Wildfires	Percent of population currently living in high risk fire hazard zone*4,6	
	Sea Level Rise (in coastal areas)	Percent of population living in 100-year flood zone and 55 inches of sea level rise*2.6	
POPULATION SENSITIVITY	Children	Percent of population aged less than 5 years	
	Elderly	Percent of population aged 65 years or older <sup>6</sup>	
	Poverty	Percent of population whose income in the past year was below poverty level*7	
	Education	Percent of population aged $\geq$ 25 years with less than high school educational attainment $^{17}$	
	Outdoor Workers	Percent of population employed and aged ≥ 16 years working outdoors*7	
	Vehicle Ownership	Percent of occupied households with no vehicle ownership <sup>17</sup>	
	Linguistic Isolation	Percent of households with no one aged ≥ 14 years speaking English*7	
	Physical Disability	Percent of population with physical disability (ambulatory disability)*8	
	Mental Disability	Percent of population with mental disability (cognitive disability)*8	
	Health Insurance	Percent of population without health insurance <sup>9</sup>	
	Violent Crime Rate	Number of violent crimes per 1,000 residents <sup>10</sup>	
ADAPTIVE CAPACITY	Air Conditioning	Percent of households without air conditioning*11,6	
	Tree Canopy	Percent of area not covered by tree canopy*12.6	
	Impervious Surfaces	Percent of area covered by impervious surfaces*12,6	

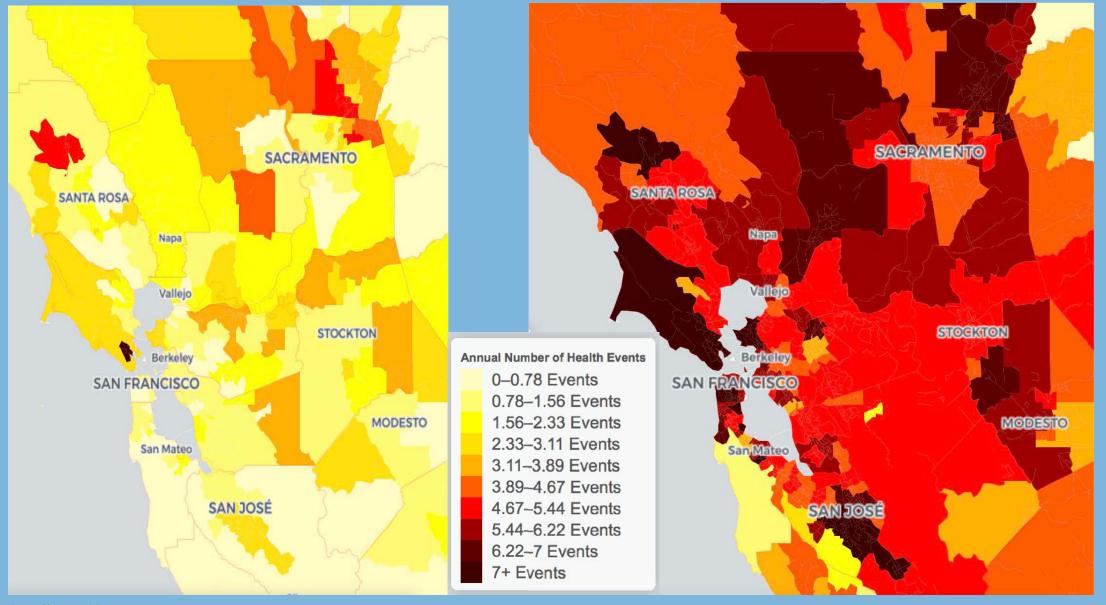
https://bit.ly/calbrace

#### **CDPH Climate Change and Health Vulnerability Indicators**



https://www.discovery.cdph.ca.gov/ohe/CCHViz

#### **CDPH Climate Change and Health Visualization**



https://www.cal-heat.org

#### **CA Heat Adaptation Tool**

#### CALIFORNIA BUILDING RESILIENCE AGAINST CLIMATE EFFECTS (CALBRACE)

#### CalBRACE - 2017 Climate Change and Health Profile Reports

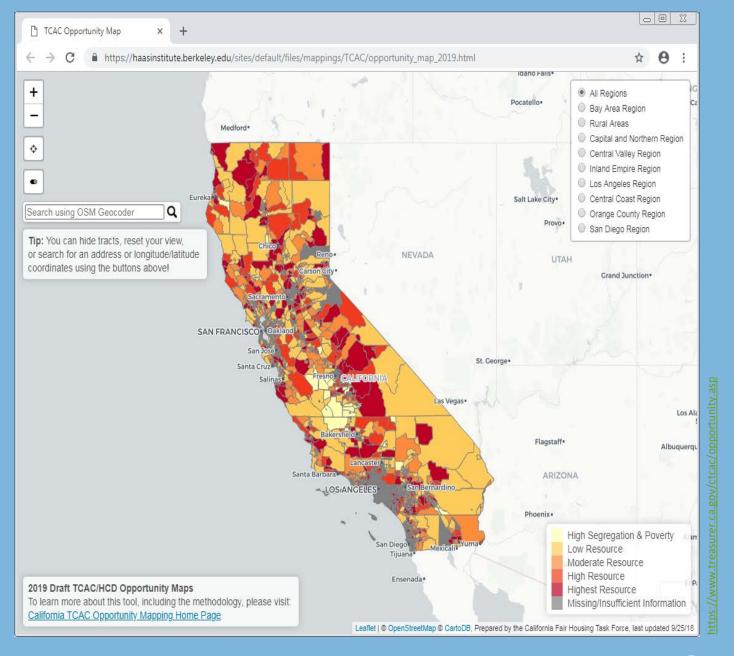
The Climate Change and Health Profile Reports are designed to help counties in California prepare for the health impacts related to climate change through adaptation planning. The reports present projections for county and regional climate impacts, the climate-related health risks, and local populations that could be vulnerable to climate effects. The information is based on available science compiled from previously published, state-sponsored research and plans. We invite local public health agencies in California and their partners to use these reports to inform their efforts to address climate change and public health in their unique counties and regions.

These reports were developed by the California Department of Public Health
– Office of Health Equity's CalBRACE Project with funding from Cooperative
Agreement 5UE1EH001052 with the Federal Centers for Disease Control and
Prevention(CDC). Its contents are solely the responsibility of the authors and
do not necessarily represent the official views of the CDC or the US
Department of Health and Human Services.



Bit.ly/CalBRACEtoolkit

https://www.cdph.ca.gov/Programs/OHE/Pages/ClimateHealthProfileReports.aspx



**Housing Opportunity Index and Maps** 

# Policy landscape of climate risk assessment and housing development



Source https://www.mercurynews.com/2018/11/24/natural-disasters-will-be-a-priority-for-incoming-governors/

Policy	Climate related	Housing related	Mandatory
Exec. Order B-30-15	X		Yes
SB379	X	X	Yes
RHNA		X	Technically
TCAC/HCD Opportunity Map		X	Incentive

#### Sample of Recent CA State Policies

#### Funding for disaster recovery



https://sidsdock.org/when-will-the-worlds-polluters-start-paying-for-the-mess-they-made

## How does this play out on the ground?

Sonoma County after a climate disaster



https://www.nytimes.com/2018/08/23/us/california-today-fires-humans.html



https://www.sfchronicle.com/bayarea/article/north-bay-wildfires-rebuilding-12804162.php

## What else is needed to plan for the climate present and future?

1. Introduce yourself. State your community, your position or role in the community

2. What are the big climate issues surfacing in your community? drought, fire, extreme heat, sea level rise, etc.

- 3. What are the tools, policies, or funding resources that are available in your community to address climate change?
- 4. What else is needed?

#### **Dyad Discussion**

- 1. What are community development or developer strategies that would make meaningful change?
- 2. What local government strategies will make meaningful change?
- 3. What role should the state play?
- 4. What positions or campaigns could organizers advance?
- 5. What are existing tools, policies, or funding streams that could be better leveraged?

#### **Group Discussion**

#### Thank you!

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